



## Gulf of Mexico Harmful Algal Bloom Bulletin

17 July 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: July 13, 2006

### Conditions Report

A harmful algal bloom has been identified in Lee and northern Collier Counties. Patchy low impacts are possible in Northern Lee County today through Thursday. Patchy moderate to high impacts are possible in coastal areas from Central Lee County to Northern Collier County through Wednesday, with patchy very low to low impacts expected on Thursday. Patchy moderate to high impacts are possible for the San Carlos Bay and Pine Island Sound regions today through Thursday. Reports of dead fish and discolored water are possible.

### Analysis

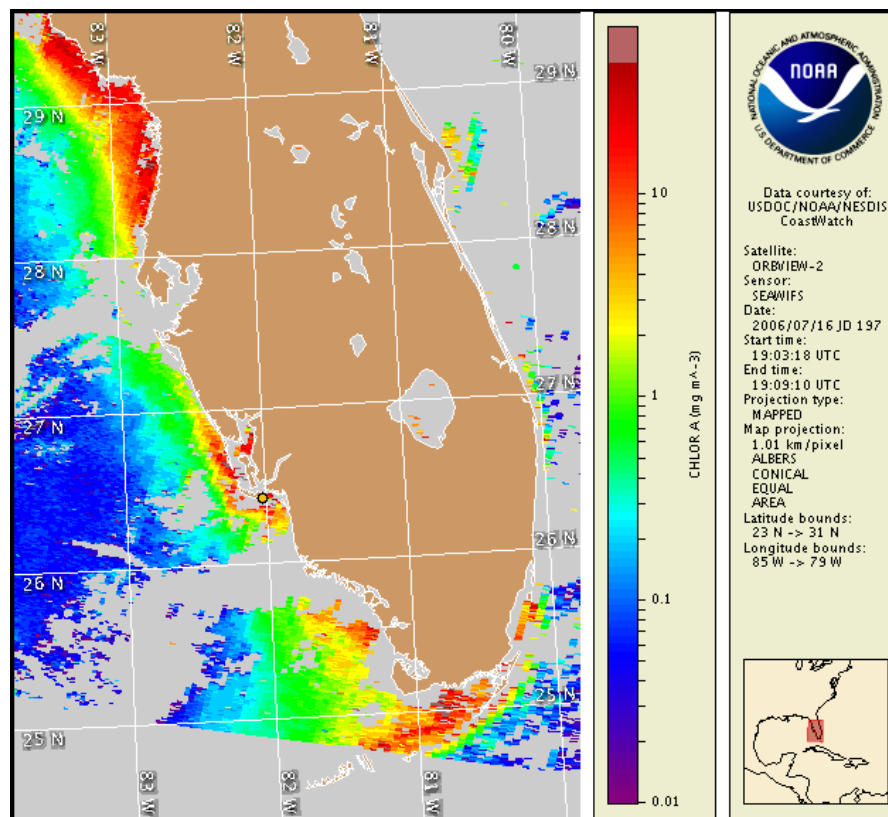
The harmful algal bloom has continued to intensify in Lee County, particularly in San Carlos Bay, Pine Island Sound, and Southern Sanibel Island. Concentrations have increased from not present at Boca Grande Pass (7/5; FWRI) to very low (7/11-13; FWRI) and from very low at Redfish Pass and San Carlos Bay (7/5; FWRI) to medium and high concentrations (7/11-13; FWRI). Concentrations range from low to medium in Collier County with a medium onshore at Seagate (7/13;FWRI) and a medium offshore at Wiggins Pass (7/11; FWRI). Present samples have been identified offshore of Marco Island, further sampling is recommended. Imagery from July 16 indicates a distinct band of high chlorophyll ( $>20\mu\text{g/l}$ ) with a northern extent of  $26^{\circ}44'9''\text{N}$ ,  $82^{\circ}18'56''\text{W}$  and a southern extent of  $26^{\circ}34'39''\text{N}$ ,  $82^{\circ}13'57''\text{W}$ . July 16 imagery also indicates another high chlorophyll patch ( $>12\mu\text{g/L}$ ) southeast of Sanibel Island at  $26^{\circ}26'54''\text{N}$ ,  $81^{\circ}59'10''\text{W}$ . Further sampling is recommended.

Variable winds throughout the week will likely maintain bloom location. Easterly winds Wednesday through Friday will minimize coastal impacts for Collier County, but may cause intensification.

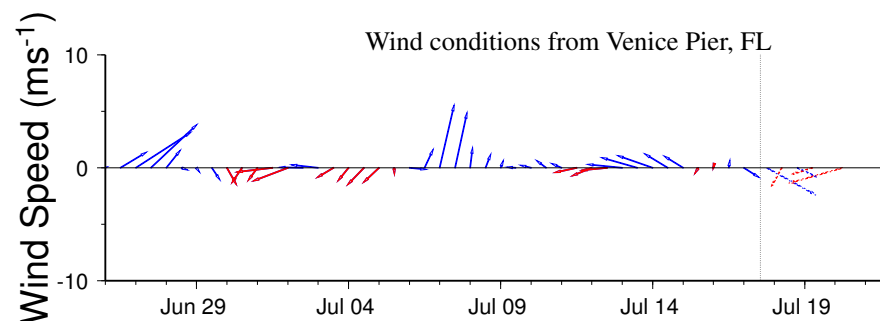
~Keller, Allen, Urizar

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

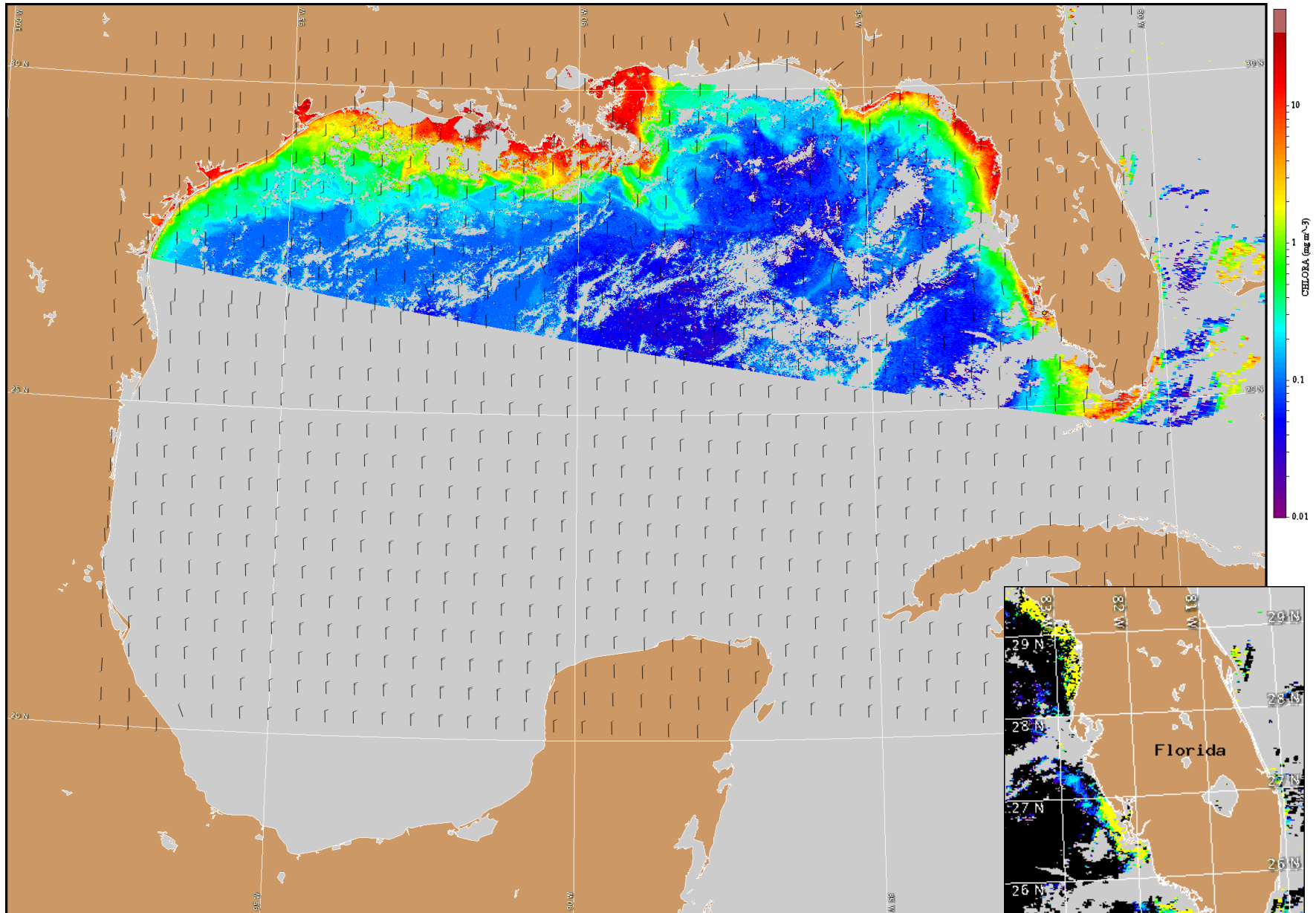


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from July 7 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

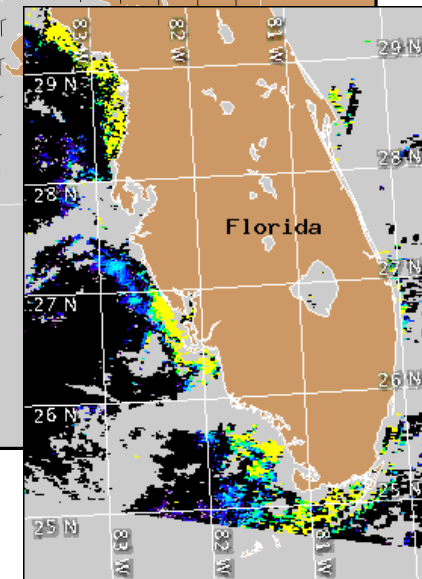


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northwestern winds today & tonight at 5-10 knots (3-5 m/s). Variable winds Tuesday through Wednesday at 5-10 knots (3-5 m/s). Easterly winds Wednesday night, with southeasterly winds on Thurs- day at 5-10 knots (3-5 m/s).



Satellite chlorophyll image and forecast winds for July 18, 2006 06Z with cell concentration sampling data from July 7 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).